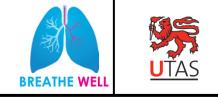
Assessing the effectiveness of social media, compared to traditional advertising methods, in recruiting eligible participants to research studies



Stuart Ferguson University of Tasmania

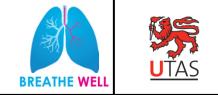


NHMRC CENTRE OF RESEARCH EXCELLENCE FOR CHRONIC RESPIRATORY DISEASE AND LUNG AGEING IN COLLABORATION WITH THE ROYAL HOBART HOSPITAL, QUEENSLAND INSTITUTE OF MEDICAL RESEARCH AND THE UNIVERSITY OF MELBOURNE



- I have received researcher-initiated project grant funding from Pfizer (through the GRAND initiative), have worked as a consultant for GSK & Chrono Therapeutics, & have served on an advisory board for Johnson & Johnson.
- Throw and Frandsen have nothing to declare.





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- Dr Frandsen is supported through a fellowship from Cancer Council Tasmania.



- Recruitment of participants crucial for the success of studies
- Difficultly often under-estimated
 - Find the right people at the right time
 - Increasing difficult as smoking rates decrease
- Traditional strategies: "old media"
 - Newspapers, radio, television, (flyers)
 - Decreasing "reach" over time
 - Broad—non-specific—audience



- Increasing popularity & use
- Facebook
 - Worldwide: >1.7 billion active users
 - >1.5 billion active mobile users
 - >4.7 billion pieces of content shared daily
- Twitter: >315 million active users
- Instagram: >400 million active users
- Attractive target for advertisers, including researchers
 - Online surveys & clinical studies

Advantages of using social media for recruitment

- Reach
- Targeting (e.g., geographic, demographic)
- Real-time control
 - Expenditure
 - Participant flow
- Better conversion rates?
 - Procedure facilitates self-screening?
 - Informed contacts?
- Cost effective?





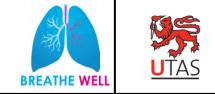
You may be eligible to take part in this research project. Compensation provided.

Quit smoking for research utas.edu.au



UTAS is looking for smokers ready to quit. You may be eligible. Compensation provided.





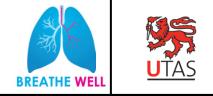
- Concerns about the "reach" of social media
 - Young, well-educated / "tech savvy", female
- Demographic profile becoming more diverse
 - >60%?! of Australian have a Facebook account
 - Average Australian user now >40 yrs old
 - Traditional vs Facebook: Samples well-matched (Frandsen et al 2014)
 - Younger, but similar smoking characteristics
 - Needs to be replicated

Objectives



- Examine conversion rates
 - Screened, eligible, enrolled, and completed
 - Cost per participant
- Compare demographic characteristics

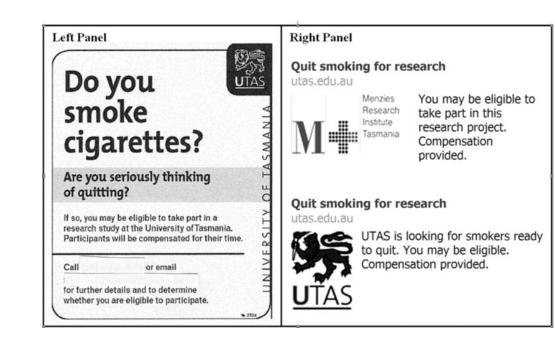
Methods



- Data from a recently completed RCT
 - Sample: Interested quitters
- Range of recruitment methods
 - Assessed at screening
- Compared endpoints by

recruitment source

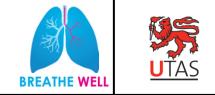
Traditional vs Facebook





Recruitment strategy		n (%)
Social media	Facebook	228 (55.1)
Traditional media		148 (37.5)
	Newspaper	92 (22.2)
	Word of mouth	33 (8.0)
	Flyer	22 (5.3)
	Internet ^a	4 (1.0)
	Radio	1 (0.2)
	Unknown ^a	34 (8.2)

~55% of individuals screened heard about the study via Facebook



	Social media AUD \$5183.13		Traditional media	Traditional media	
Total cost			AUD \$4343.10		
	n (%)	\$	n (%)	\$	
Screened	228 (100)	22.73	148 (100)	29.35	
Eligible	138 (60.5)	37.56	97 (65.5)	44.77	
Enrolled	92 (40.4)	56.34	83 (56.1)	52.33	
Completed	50 (21.9)	103.66	54 (36.5)	80.43	

- Social media:
 - Lower conversion rates at all time-points
 - More cost effective for finding eligible participants
 - BUT: Less cost effective for later endpoints



	Visited website prior to contacting researchers	
	Yes	No
	n (%)	n (%)
Overall (screened) ^a	284 (80.5)	69 (19.5)
Eligible ^b	176 (62.0)	48 (69.6)
Enrolled ^b	128 (45.1)	37 (53.6)
Completed ^b	75 (26.4)	23 (33.3)

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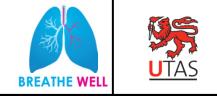
Participants recruited via Facebook similar to

those recruited using traditional methods



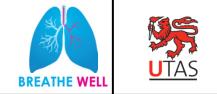
		Overall	Social media	Traditional media	
		n=182	n=92	n=83	
	Demographics				
	Age, years, mean (SD ^a)		39.3 (10.9)	44.9 (12.6)	
	Gender (female) ^b , n (%)		43 (46.7)	28 (34.1)	
Education ^c , n (%)					
	High school or less, n (%)	74 (45.4)	39 (45.9)	35 (44.9)	
	Certificate or trade, n (%)	60 (36.)	34 (40.0)	26 (33.3)	
	College, n (%)	29 (17.8)	12 (14.1)	17 (21.8)	
	Income ^d , n				
	<\$21,000	18 (10.9)	6(7.1)	12(15.0)	
	\$21,000-\$51,999	38 (23.0)	19 (22.4)	19 (23.8)	
	\$52,000-\$77,999	38 (23.0)	24 (28.2)	14 (17.5)	
	\$78,000-\$103,999	31 (18.8)	16 (18.8)	15 (18.8)	
	>\$104,000	40 (24.2)	20 (23.5%)	20 (25.0)	
Smoking characteristics					
	CPD, mean (SD)		19.1 (8.0)	17.4 (5.8)	
	Motivation to quit, mean (SD)	89.5 (10.8)	89.2 (8.0)	91.1 (8.8)	
	Confidence to quit, mean (SD)	72.6 (19.3)	69.2 (19.7)	77.3 (16.4)	
	HSI, mean (SD)	3.0 (1.2)	3.2 (1.3)	2.9 (1.2)	
IN COLLABORATI	Number of past quit attempts, mean (SD)	3.8 (3.9)	4.1 (4.4)	3.3 (2.8) OF	

OF MELBOURNE



- Participants recruited via Facebook similar to those recruited using traditional methods
 - Younger
 - Less confident about quitting spontaneous?
- Lower conversion rates with social media
 - Generate interest, but not commitment
- People do not appear to self-screen
 - Possible to drive / incentivise?

Also see: Frandsen M, Thow M, Ferguson SG (2016). JMIR Res Protoc;5(3):e161



- Collaborators
 - Dr Mai Frandsen & Megan Throw
 - Georgie Gallagher
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- Funding bodies
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 - RHHRF
 - Cancer Council Tasmania